IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants	:	Svend Birkelund, Gunna Christiansen, Katrine Knudsen, Per Mygind og Anne-Sofie Hebsgaard Pedersen
Serial no.	:	09/446,667
Filed	:	December 23, 1999
For	:	Surface exposed proteins from Chlamydia pneumoniae
Examiner	:	Khatol S Shahnan-Shah
Art unit	:	1645

(considered PAS 3/5/06.

Second Declaration of Svend Birkelund

1. I, Svend Birkelund, Sindalsvej 17, DK-8240 Risskov, Denmark, in my capacity as professor at The Department of Medical Microbiology and Immunology, DK-8000 Aarhus C, Denmark, do state and declare as follows:

2. I am one of the named inventors of the above-captioned patent application. I believe that I am a person skilled in the art to which the above-captioned application pertains.

3. I have read the Office Action dated 11 March 2005. According to the Office Action the applicant has not established extrinsic evidence before the Examiner that Melgosa's 98 kDa band was a mixture of proteins.

4. To further emphasize that the Melgosa 98 kDa band in fact contained a mixture of proteins, I have, by following the instructions described by Melgosa et al. for the separation procedure, analysed the polymorphic outer membrane proteins in the 98 kDa band of *Chlamydia pneumoniae* AR39.

4.1 Problem for analysis
The present inventors have previously characterized the 98 kDa protein complex from the outer membrane complex of *Chlamydia pneumoniae* VR1310 and cloned the genes encoding the proteins (patent number PA200100581 23.06.1997, PCT 19.06.1998). The results are described in the papers: Knudsen et al. 1999, Vandahl et al. 2001, Vandahl et al. 2002.

Melgosa et al. (1993) characterized a 98 kDa band in the outer membrane complex of *Chlamydia pneumoniae* AR39 and showed that antibodies to the protein band reacted in a species specific manner.